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TWO NEW *EPICAUTA* FROM MEXICO (COLEOPTERA: MELOIDAE)

Juan M. Mathieu

Instituto Tecnologico de Monterrey, Unidad Noroeste, Cd. Obregon, Sonora, Mexico.

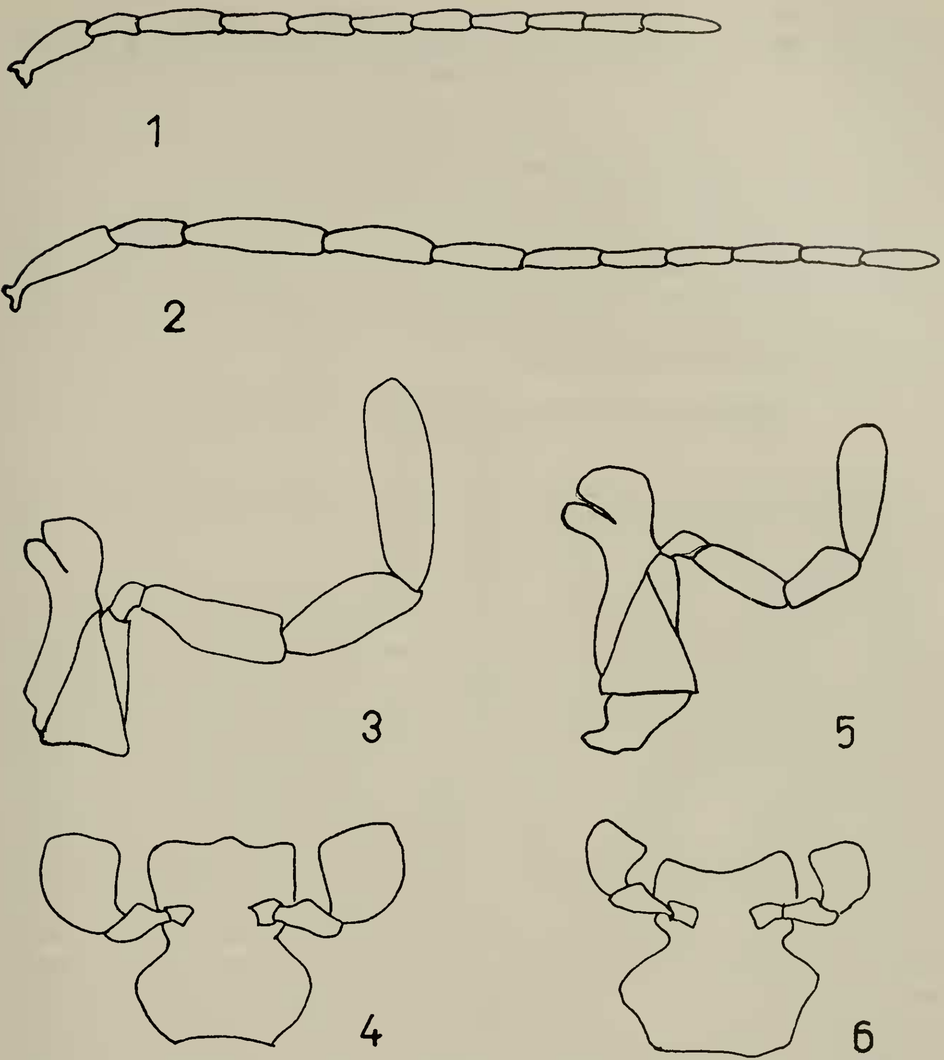
Abstract.—Two new species are described, *Epicauta (Epicauta)* ***teresa*** from southern México and *E. (E.)* ***delicata*** from northern México, *Epicauta teresa* has a strong similarity to *E. laevicornis* (Werner) but can be separated from it by the lack of a concavity on the metasternum of the male. *Epicauta delicata* is assigned to the Vittata Group of *Epicauta* and represents an unmodified species of that group, except for its very distinct male genitalia.

Over 200 species of *Epicauta* have been described from North and Central America. Recently, new and better roads have permitted more extensive collecting in México, resulting in the discovery of new species of Meloidae. Two of these are described below.

Epicauta (Epicauta) teresa Mathieu, New Species
Figs. 1–6, 10, 11

Ground color black except elytra brown. Head, thorax and abdomen covered with light yellow setae. Antenna moderately long, slender and tapering (Figs. 1, 2), segments 3–5 of male elongate and somewhat flattened; length 15–20 mm.

Holotype male.—Length 18 mm. Head narrowly rounded behind eyes, length from occiput to fronto-clypeal suture 3.1 mm, width behind eyes 3.1 mm; occiput flattened, median impressed line fine but distinct, front shallowly excavated between eyes, calluses denuded and small; surface of head evenly covered with equidistant shallow punctures, narrow intervals of punctures microreticulate. Antenna ca. 11.3 mm, l/w measurements of antenna from base to apex 1.42/0.42, 0.92/0.36, 1.67/0.36, 1.33/0.36, 1.08/0.32, 0.92/0.22, 0.83/0.20, 0.79/0.20, 0.75/0.16, 0.75/0.16, 0.92/0.20 mm; segments 3 to 5 slightly flattened (0.28 mm in thickness): 1–5 shiny, 1 and 2 with stronger and denser setae than 3 to 5 which are clothed with very sparse slender setae; 3 straight, 4 with a slight curvature dorsad; 6 to 11 subequal and slender, more opaque due to a covering of appressed, dense short brown setae, also retaining the sparse longer and slender setae as on segments 3–5. Maxillary palpus (Fig. 3) elongate with dense short setae, 1.0 × 0.30, 0.72 × 0.36, 0.80 × 0.32 mm from apex to base. Labial palpus with apical segment flattened, as wide as long (0.96 × 0.96 mm) (Fig. 4) shiny with only sparse small setae. Pronotum 1.18 (3.16 by 2.67 mm) as long as wide; sides subparallel, gradually convergent from apical ⅓; surface similar to head, setae on surface of middle and hind ⅓ becoming brownish. Elytra 14 mm long, 4.5 mm wide, humeri distinct, nearly parallelsided, widest toward apex; setae brown except along middle and side which has a narrow line of yellow hairs. Legs thin and unmodified, mid- and



Figs. 1–6. *Epicauta teresa.* 1, Right antenna of female. 2, Right antenna of male. 3, Right maxilla of male. 4, Labium of male. 5, Right maxilla of female. 6, Labium of female.

hindtibial spurs spiniform, outer spur ¾ length of inner one; foretibial spurs subequal. Sixth visible sternum slightly excavated. Phallobase and aedeagus (2.24 mm in length) as in Figs. 10, 11.

Female.—Segments 1–5 of antenna appear shinier than rest. Dimorphism evident from measurements taken from a specimen of comparable size to holotype. Antenna: 1.0/0.36, 0.64/0.28, 1.0/0.24, 0.8/0.20, 0.74/0.20, 0.74/0.21, 0.72/0.21, 0.74/0.20, 0.68/0.20, 0.70/0.19, 0.90/0.18 from base to apex (Fig. 1). Maxillary palpus: 0.74/0.30, 0.5/0.22, 0.6/0.22 from apex to base (Fig. 5). Labial palpus: 0.36/0.32, apical segment (Fig. 6).

Adults in this series show little variation in size but some individuals have more light yellow setae in middle of elytra giving appearance of a faint vita.

Holotype.—♂, 10 km NE of Cintalapa, Chiapas, México, 9 August 1975, Alfonso N. García Aldrete. Deposited in the collection of the California Academy of Sciences, San Francisco. Dr. García informs me that the type-locality is at an elevation of 400 m, where the insects were actively feeding on an herbaceous blooming plant of *Capsicum* sp. of about 1 m in height. He collected all individuals (10 ♀, 7 ♂) in a disturbed tropical forest clearing used for grazing.

Remarks.—*Epicauta teresa* is a bicolored species that shared its antennal characters with the black *E. laevicornis* (Werner, 1973), but differs from it in having a smaller head and lacking the metasternal excavation. *Epicauta carmelita* Haag-Rutenberg, which occurs in southern México, has a similar color pattern to that of *E. teresa* but differs in its stout appearance, its unmodified male antenna, and the strongly modified male pygidium.

Epicauta (Epicauta) delicata **Mathieu, NEW SPECIES**

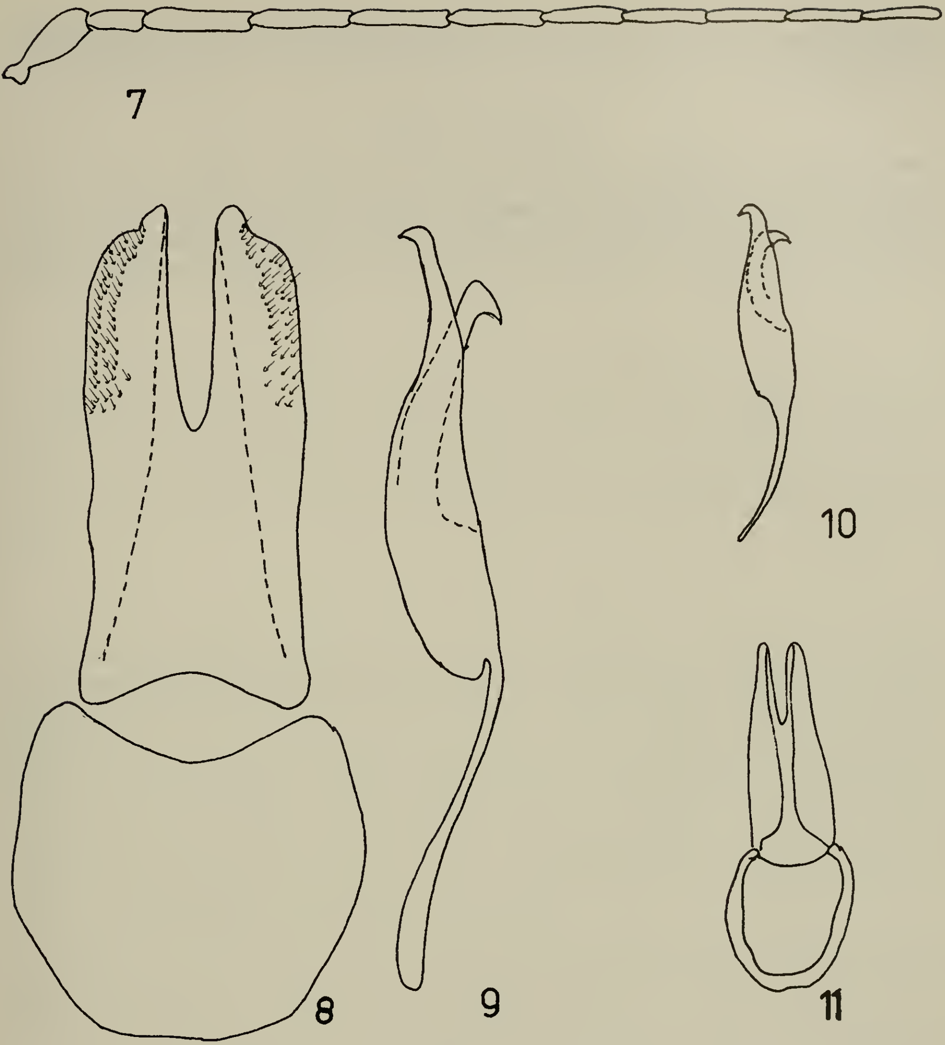
Figs. 7–9

Ground color black throughout, entirely covered with dense yellow setae except tips of femora, tibiae, and tarsi with black setae. Antenna unmodified in male, long and very slender, 3rd segment longest (Fig. 7).

Holotype male.—Length 19 mm. Head evenly rounded, densely covered with yellow setae, no punctures visible. 2.9 mm at its widest point above eyes. Distance between eyes 1.6 mm, occiput rounded, median line not distinct; front flattened between eyes, calluses obsolescent; mandibles strongly curved with front surface flat and shiny, red brown with black tips. Antenna 11.2 mm, slender with unmodified cylindrical segments, l/w measurements of segments from base to apex 1.08/0.36, 0.58/0.28, 1.33/0.28, 1.17/0.28, 1.17/0.24, 1.08/0.24, 1.00/0.22, 1.00/0.20, 0.92/0.18, 0.92/0.16, 0.92/0.16, small appressed black setae cover all segments except inner part of segment 1 which has white setae. Maxillary palpus elongate, covered dorsally with cinereous hair, denuded ventrally, 0.68/0.28, 0.56/0.24, from apex to base, apical segment attaining its widest point about ⅓ from tip. Labial palpus with last segment hatchet shaped 0.40/0.24, with its ventral surface devoid of setae. Pronotum 2.9 mm in length, 2.5 mm wide at base strongly narrowing toward head to 1.1 mm. Elytra 15 mm long, 3.8 mm wide, left elytron damaged on its last ⅓; humeri rounded and marked with black setae, 2 small black dots present on each side of scutellum. Legs thin; foretibia shorter than tarsus, foretarsus with 1st segment twice as wide as other segments and with an enlarged solid pad, other segments with divided tarsal pads. Femora and tibiae black at apex, tarsi with more black setae from basal segments to distal ones, other setae cinereous to light yellow, fore- and midtibiae with spiniform spurs, hindtibiae with stouter spurs and lacking a comb. Phallobase and aedeagus (2.16 mm in length) as in Figs. 8–9.

Holotype.—♂, Paila, Coahuila, México, 31 May 1967, J. Mathieu, at light. Deposited in the collection of the California Academy of Sciences.

Remarks.—This species appears to be related to the Vittata Group of *Epicauta* (Adams and Selander, 1979) by sharing the following characters: antenna slender, tapering distad, enlarged first tarsal segment, and genitalia differentially sclerotized (as explained later). The combination of these characters are present on *E. tamara* Selander and *E. temexa* Selander. *Epicauta vittata* (Fabricius), *E. temexa* and



Figs. 7–11. 7–9, *Epicauta delicata*. 10, 11, *E. teresa*. 7, Right antenna of holotype. 8, 10, Phallobase. 9, 11, Aedeagus.

some other species of the Vittata Group have a Y-shaped line with stronger sclerotization running on the middle of the tegmen from the base toward the internal surface of the divided lobes. These features of the genitalia are present in *E. delicata* along with its distally expanded lateral lobes, clothed with tiny setae (Fig. 8). The two black dots on each side side of the scutellum, could represent incipient vittae. In a study on variation of markings and color on *E. albida* (Say), it was shown that 13% of the specimens studied had developed one or two fine vittae on each of the elytra from humeral spots; the rest presented spots similar to those found on *E. delicata* (Selander and Mathieu, 1969). *Epicauta atrivittata* (LeConte), a species of the Albida Group of the genus *Epicauta,* is the only representative of the eight species of that group which has the vittate condition, indicating that vittae have appeared independently more than once within the genus.

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